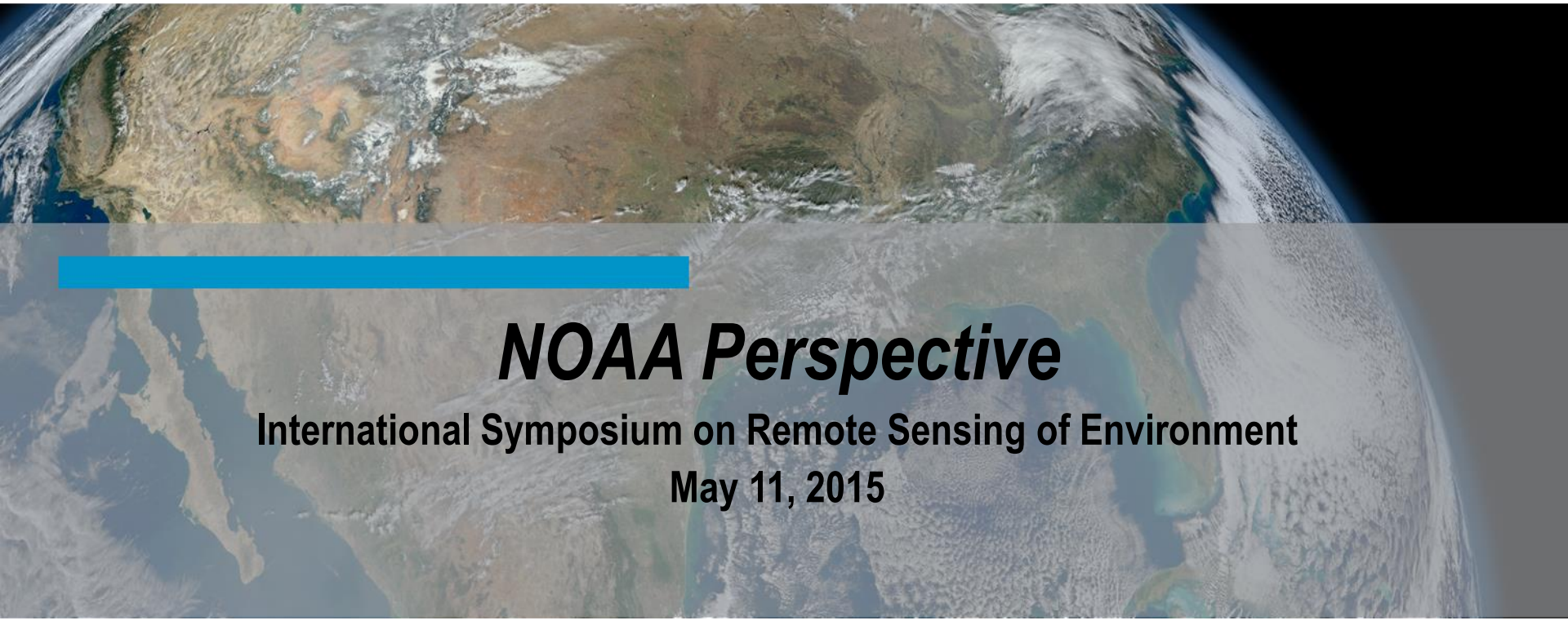


NOAA Perspective

International Symposium on Remote Sensing of Environment

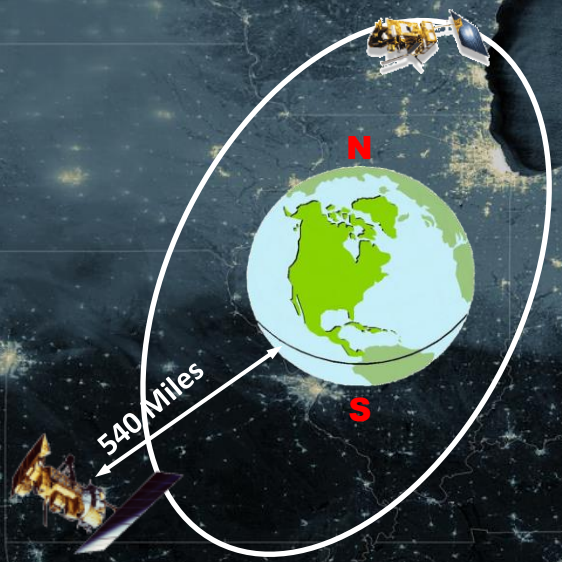
May 11, 2015

NOAA Satellite and Information Service

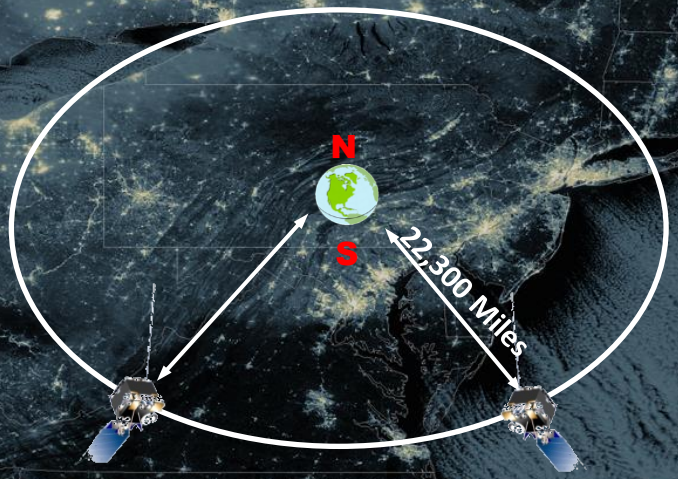
Dr. Stephen Volz, Assistant Administrator

NOAA's Observational Paradigm Has Been: Two Orbits, One Mission

Polar-orbiting Operational Environmental Satellites (POES) Followed by S-NPP and JPSS-1 thru -4



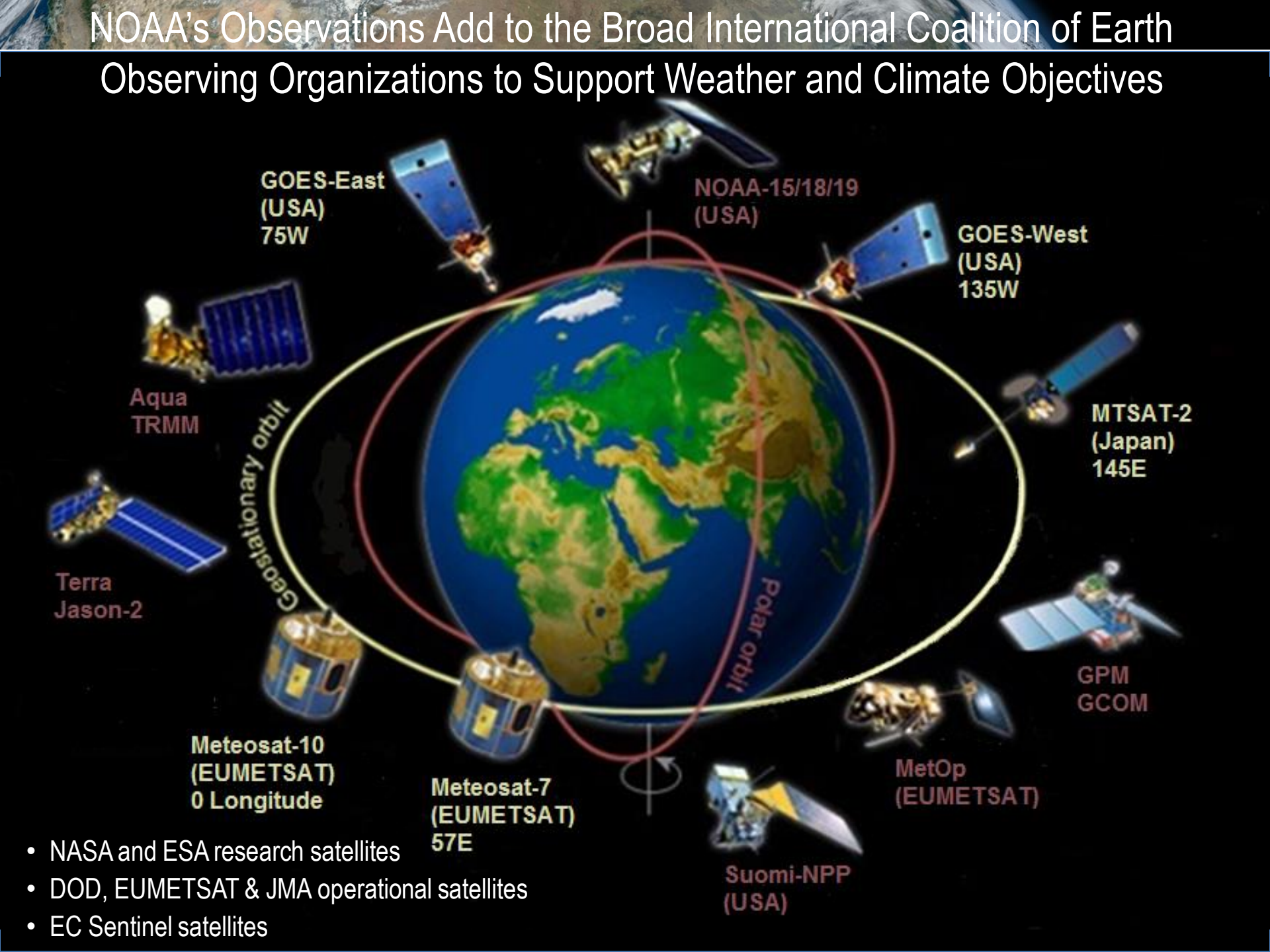
Geostationary Operational Environmental Satellites (GOES), Followed by GOES-R thru -U



The current NOAA program plans include sustained constellations from these observation points through ~2038.

S-NPP image of North America

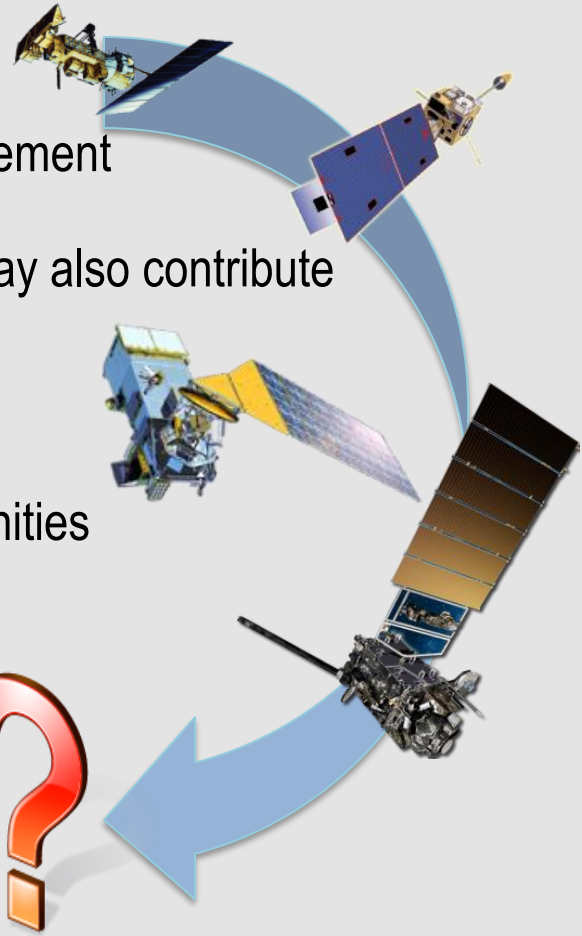
NOAA's Observations Add to the Broad International Coalition of Earth Observing Organizations to Support Weather and Climate Objectives



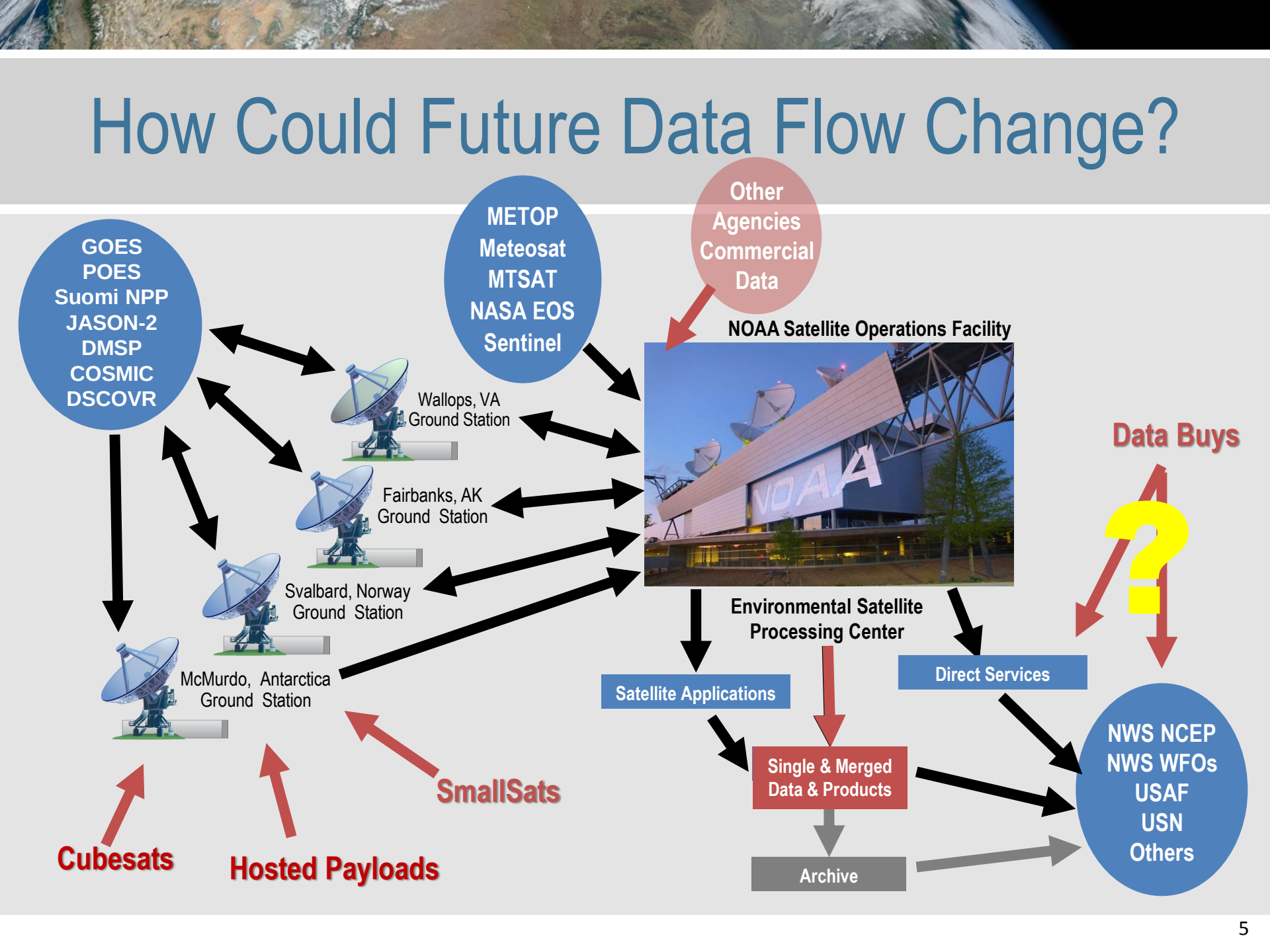
- NASA and ESA research satellites
- DOD, EUMETSAT & JMA operational satellites
- EC Sentinel satellites

What's Next?: Moving Beyond "Two Orbits"

- We are broadening our "polar satellite" LEO perspective
  - Core POES/JPSS satellites through ~2038 augmented with:
    - Cosmic-2 RO mission, Earth Observing Nanosatellite-MW
    - Additional complementary evolving and emerging measurement capabilities
    - Smallsats or hosted payloads, alone or in constellation, may also contribute
- We will also broaden our GEO perspective
  - GOES-R series through ~2036, may augment with others:
    - Alterative architectures, including hosted payload opportunities
    - Possibly to include alternative orbits
- Increasingly, the services we provide will be driving towards more integrated data products, merging:
  - Across platforms, both LEO and GEO
  - Across Agencies, using observations from multiple sources
  - Across public-private domain



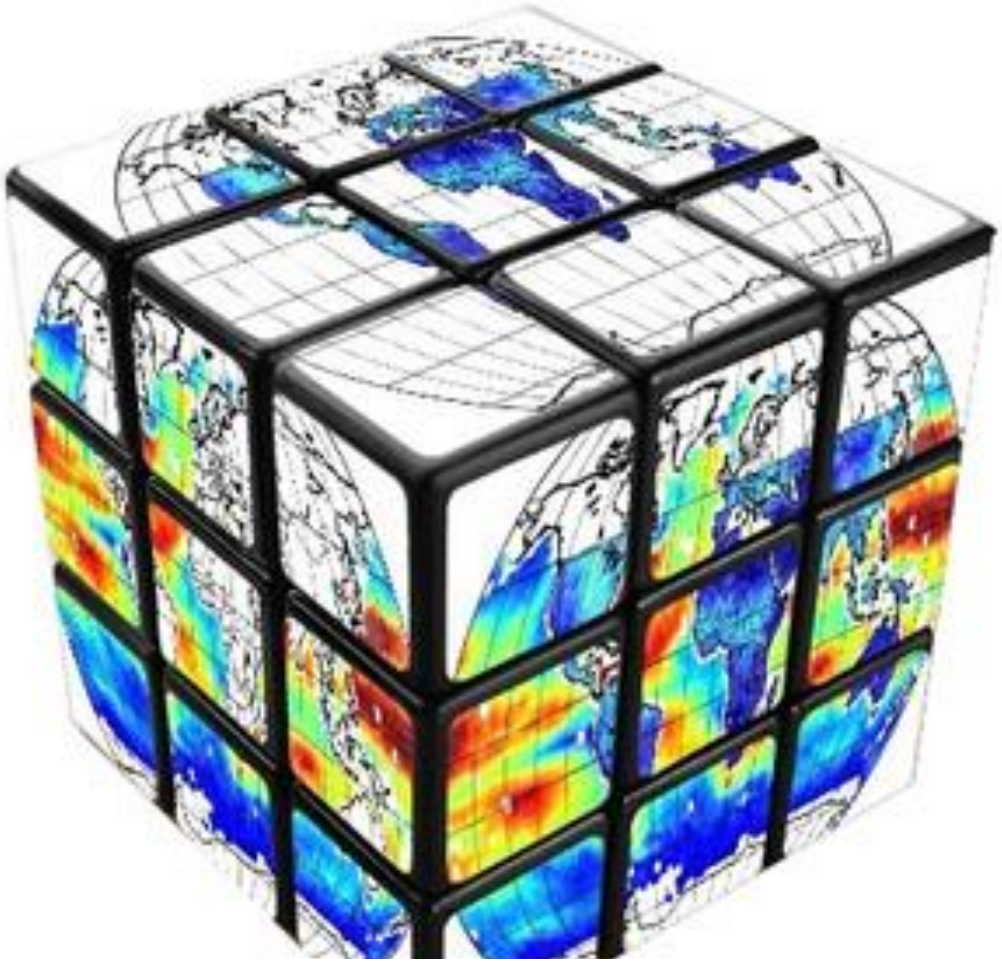
How Could Future Data Flow Change?



What are the Challenges to our integrated observing approach?

- We need to address issues of observations related to:
  - Data formatting
  - Data quality
  - Data ownership
  - Data continuity

What are the Challenges to our integrated observing approach?



Increasingly, more of our products fuse different data sets, so we must learn to do that fusion efficiently and reflexively, regardless of where the data come from, and with confidence that the fusion will produce reliable information

NOAA NESDIS Mission & Challenge

Our mission is to deliver accurate, timely, and reliable satellite observations and integrated products and to provide long-term stewardship for global environmental information in support of our Earth Observation mission.

Our challenge is to provide these observations and products reliably while improving the information content and evolving to stay current with the expanding complexity of the Earth Observing contributors

Questions?